ABSTRACT OF THE DISCLOSURE

Disclosed are methods for the use of pro-opiomelanocortin-encoding polynucleotides in the creation of transformed host cells and transgenic animals. In particular, the use of recombinant adeno-associated viral (rAAV) vector compositions, virions, and pluralities of virus particles that comprise a nucleic acid segment that expresses one or more mammalian pro-opiomelanocortin polypeptides in suitably transformed host cells is described. Also disclosed are methods for the treatment and amelioration of symptoms of a variety of conditions and disorders in an animal, including hyperinsulinemia, obesity, adiposity, overeating, and related eating disorders.

5